Teetaj (TJ) Pavaritpong

Senior undergraduate CS & Stats major with a passion for data science, AI/ML, and software engineering

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Education

University of Illinois Urbana-Champaign   Expected Graduation: Dec 2024

B.S. in Statistics & Computer Science; GPA: 3.52 / 4.00 ; ACT: 34/36

Relevant Coursework: Algorithms, Computer Systems, Database Systems, Numerical Methods, Statistical Modeling, Stochastic Processes, Machine Learning, Programming Languages & Compilers

Work Experience

Agoda   Jan 2023 – Jun 2023

Data Engineer Intern

- Migrated Google Ads API report downloader applications using **Hadoop**, **Spark**, **Hive**, **Scala**, and **GitLab CI/CD**
- Optimized algorithm performance, reducing runtime from **4 hours to 20 minutes**
- **Resolved 2 critical production incidents** in ML pipelines for ad bids
- Implemented SQL validation for anomaly detection, backtested in **RStudio**
- Developed a Slack bot using **Python** & **GPT-3** for explaining SQL and Spark ETL pipelines

Zipmex   Jun 2022 – Jul 2022

Software Engineer Intern (Frontend)

- Revamped website with new **React** components to match Figma designs
- Enabled dark/light theme support with **CSS** modifications
- Wrote test cases and improved type inference using **Jest.js** and **TypeScript** catch & prevent bugs in codebase

Central Group   Jun 2019 – Aug 2019

Software Engineer Intern (Mobile)

- Integrated barcode-scanning library into Ionic/Angular mobile app, optimizing warehouse processes
- Utilized **Tesseract.js OCR** for product information extraction from receipts, saving retail workers' time

Projects & Involvement

QuantIllinois | *Python*   Sep 2023 - Present

- Researching & implementing trading strategies for student-run investment fund

Sociological Factors Affecting Number of Days Absent from School | *R, ANOVA, LaTeX*   Dec 2023

- Performed Box-Cox transformation on data then fitted a multi-way ANOVA model
- Found a significant three-way interaction between race, learner type, and school level on the number of absences

Analysis of IMDb Movies Data Set: Estimating U.S. Gross Revenue | *R, Linear Regression, LaTeX*   Oct 2023

- Conducted exploratory data analysis and cleaned data to make it suitable for analysis and model fitting
- Fitted a multiple linear regression model to predict the U.S. gross revenue of new movies based on metrics from IMDb data; Validated model by performing regression diagnostics

Illini CC'd: Credit Card Recommender (Team Lead) | *React, Node.js, MySQL, GCP, Material-UI*   Sep - Dec 2022

- Led team in designing database schema, scraping the web for credit card offers, developing API, creating React front-end, and hosting on GCP

Blackjack Simulator | *C++, Catch2, Cinder*   June 2022

- Developed a 2D blackjack simulator designed to train players in optimal strategy

Openflights Dataset Analyzer | *C++, Catch2*   May 2022

- Implemented BFS, Dijkstra's algorithm, and PageRank for shortest flight itinerary and identifying airport hubs

Skills

Languages: Python, R, SQL, C/C++, Scala, JavaScript, HTML/CSS
Frameworks & Libraries: Spark, Hadoop, NumPy, Pandas, PyTorch, React.js, Node.js, Flask
Other Tools: Git, Linux, Docker, Agile/Scrum LaTeX